

RUNOFF

MURDER
UNDER THE
MICROSCOPE



These activities will give you and your group some valuable information which might help you when solving the crime.

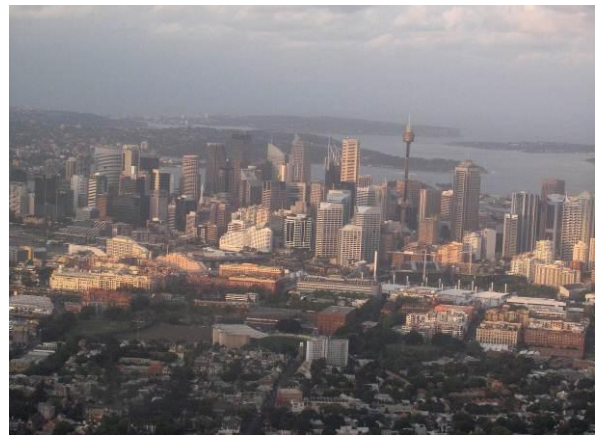
Look for and collect articles about water quality. These might show how widespread and serious run-off can be.

Where does all the water go?

Think about the place where you live.

When it rains, where does all the water go? Some of it might go into a stormwater drain, some might soak into the ground. What happens to the rest?

What's in the runoff?



Look at the pictures on the previous page.

- What have the activities in these pictures to do with runoff?
- If rain falls in these places, what kinds of things would the water pick up as it flows away?

Think about farms, towns, factories and recreation spots in your local catchment area. Make a list of the things that might be used, spread or dropped in and about the land in your area.

- What will happen to those things when the rain falls?
- Think about the way(s) in which runoff could be minimised.

Research



Using the internet, newspapers and other sources of information see if you can find out about some real-life events caused by excessive runoff.

Below is a link to get you started:

<http://www.theaustralian.com.au/news/health-science/port-spoil-runoff-threat-to-great-barrier-reef/story-e6frg8y6-1226286684578>

Find out about the way(s) in which runoff can be minimised.

Activity: Experiment

Devise an experiment to show what happens

- When the rain is light (drizzle)
- When there is a long period of heavy rain
- When there is a short storm with heavy rain

Try to show the different kinds of rain on different surfaces. For example

- A soft surface such as sand
- A surface with loose soil
- A hard surface such as compacted clay

Hint: You could use a hose with a nozzle that has different spray settings.

Record the results of your experiment as a chart with the headings:

Surface	Type of rain	Effect on landscape
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What do the headlines say?



Read the headlines.
Choose one and write a short article (one or two paragraphs) to match the headline.



Extension activities

When a large number and variety of waterbugs are found in a stream, this indicates a healthy stream.

Using this activity you can conduct a waterbug survey in a waterway near you.

http://www.derm.qld.gov.au/education/teachers/water/resources/water_resource_sheet_12.pdf

Instructions for building your own waterbug dip net can be found at:

http://www.qld.waterwatch.org.au/resources/pdf/how_to_make_your_own_dip_net.pdf

The links below will also be useful.

Monitoring water quality:

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_2_monitoring_water_quality.pdf

Bank stability, erosion and run off:

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_3b_vegetation_and_habitat_health_erosion.pdf

Sharing information



What have you found out that might help you understand the crime? Share this information with the other groups.

Find a way to explain the issues relating to run-off and show how run-off can be a major contributor to the quality of our water.

Hint: For more information talk to the group who explored stormwater.